APPENDIX E

INSTRUCTIONS FOR MARKING OF DRAFT AND PREPARATION OF FINAL PROJECT SPECIFICATIONS

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INSTRUCTIONS FOR MARKING OF DRAFT AND PREPARATION OF FINAL PROJECT SPECIFICATIONS

1. This appendix is concerned with marking draft specifications for review and preparation of final specifications.

1.1. MARKING DRAFT SPECIFICATIONS

The specifications preparers shall make a thorough study of the contract drawings prior to any attempt to prepare contract specifications from memory. State-of-design drawings must be available to the preparer while marking specifications.

- a. Specifications shall be marked carefully so that there will be no doubt as to what is intended to be deleted or added. Care shall be exercised to preserve the guide complete and to ensure that deleted material is still legible to permit checking of the drafts and reinstatement of deleted material if considered necessary by CEHND personnel. When re-editing the guides to incorporate review comments, a different colored pencil shall be used to readily identify the new changes. The colored pencils used for the marking shall be readily and identifiably reproducible. One marked copy with the different colors visible shall be submitted with the standard submittals.
- b. Designer notes will be found at the back and within the text of each specification which will clarify the intent of each guide. These instructions shall be carefully followed, and all revisions and notices which occur during the contract shall be incorporated in the specification. The indexes of specifications and all notes shall be deleted from the finished specifications.
- c. CEGS's are prepared in three (3) parts: Part 1 is labeled the "GENERAL" part; Part 2 is labeled the "PRODUCTS" part: and Part 3 is labeled the "EXECUTION" part. The procedure for marking a CEGS is as follows:
- (1) Mark-up Part 3, Execution, of the specification first, then mark Part 2, Products. Mark-up Part 1, General, last since the applicable publications cannot be accurately determined until the materials and methods of work are selected.
- (2) Fill in all blank choices unless deleted. Make choices indicated by brackets and mark out brackets when choice is made.
- (3) Retain applicable guide text verbatim where possible. Make no changes to text to suit personal preference.

- (4) Delete inapplicable paragraphs, sentences, words, columns, etc., where portions of sentences are deleted, make sure the sentence remains structurally and grammatically correct.
- (5) Type or print clearly all inserts on a single $8-1/2 \times 11$ -inch sheet of paper and place them in the specification section with a matching number which indicates the exact location of the insert.

1.2 PREPARATION OF FINAL SPECIFICATIONS

There are two methods of preparing final specifications:

1.2.1 SPECSINTACT

One method involves the use of automated data processing techniques as detailed in the SPECSINTACT System Manual (see paragraph 3-7 of chapter 3). This method of specification preparation results in a final specification as shown in example 2. With this method, margins, spacings, paragraph numbering and indentation, etc., are automatically set by the system. The automation software can also reconcile reference publications, confirm section references, removes designer notes, tabulates testing, completes Part A of ENG Form 4288, and removes either metric or English units.

1.2.2 Manual Processing

This method involves the use of a manual word processor (typewriter or letter quality printer) following the guidance given below.

1.2.2.1 Headings

- a. <u>Section Number and Title.</u> The section number and title shall be centered at the top of the first page of the section. No single line of the heading shall exceed four inches in length. All letters of the section title shall be capitalized. The specifications prepared by CEHND A-E's, or other Government agencies under contract to Huntsville Division, shall use standardized numbers. The non-CEGS substitute's number designation shall conform to the numbers used in the Corps of Engineer Guide Specifications. If a CEGS is not available for a section, the number shall conform to the Construction Specification Institute's (CSI) Masterformat.
- b. <u>Paragraphs and Subparagraphs</u>. The first paragraph shall begin two spaces below the last line of the section title. Main paragraph titles shall be capitalized. The first letter of each word in subparagraph titles will be capitalized. "Widow" or single subparagraphs shall be avoided where possible.

1.2.2.2 Numbering and Indenting of Paragraphs And Subparagraphs

1.2.2.2 Numbering and Indenting of Paragraphs And Subparagraphs

- a. <u>Numbering of Paragraphs</u>. The number/period system of identification will be used. Lower case letters may be used for fourth and fifth level headings. Each numbered paragraph requires a title line; those denoted with lower case letters do not.
- b. <u>Indentation</u>. Paragraphs and subparagraphs will be uniformly indented two spaces. Allow one blank line after paragraph number and title.

1.2.2.3 References

a. <u>Section Reference</u>. When a section contains a reference to another section, the reference will be by the section number and title, e.g., (1) finish painting of structural steel is specified in Section 09900 PAINTING, GENERAL, (2) insulation shall be installed in accordance with Section 07200 ROOF INSULATION.

1.2.2.4 Margins

The first line margin shall be 25 mm (one inch) from top of the page. Left and right margins shall be one inch from the edge. Bottom margin shall be 25 mm (one inch) from the bottom of the page.

1.2.2.5 Page Numbering

All page numbers shall be centered about 15 mm (5/8 inch) above the bottom of the page. The numbering shall start with the first page of a section and shall be preceded with the section number, for example: SECTION 09900 PAGE 1, SECTION 09900 PAGE 2, SECTION 09900 PAGE 3, etc.

1.2.2.6 End of Text

The words "End of Section" shall be typed at the end of the text of a section.

1.2.3 PROCESSING

For either method of specification processing (SPECSINTACT or manual), the resultant specifications shall be prepared on good grade white bond paper 216 mm x 279 mm (8-1/2 by 11-inch) size one side only, single-spaced, 12-pitch type (matching prestige elite), using a medium black ribbon or equivalent laser printer. Typing shall be clean, clear, sharp, neat, and not dense. Each page shall be completely filled without crowding.

1.3 TABLE OF CONTENTS

A table of contents shall be prepared for the final specification package covering Divisions 1 through 16 and shall be located in the front of the package. The preparer shall contact CEHND prior to assembly of the final package to obtain the additional Division 1 Specifications needed to complete the package. These additional Division 1 specifications shall be processed in a manner so that they are in the final manuscript packages and on the final submittal IBM compatible 5-1/4-inch disks employing ASCII.

1.4 PREPARATION OF SPECIFICATION AMENDMENTS

Changes to the specifications which occur between the time the contract package is issued for evaluation and offer and the award of the package are done through amendments. The location and content (or lack thereof) of an amendment is denoted by a pair of asterisks bracketing the change, one in each margin 6 mm (1/4 inch) from the body of the text. The most common type of amendments are discussed below. The discussion of these amendments apply to Division 1 through 16 of the Construction Specifications Institute (CSI). The administrative portions of the amendment will be prepared by CEHND and transmitted to the preparer for incorporation unless otherwise stated in the contract.

a. <u>New Words, Sentences, Paragraphs/ Deleted Words, Sentences, Paragraphs.</u>

- (1) The addition of words, sentences, and paragraphs shall be at the point in the text where they achieve the desired impact. Asterisks shall be placed in the left-hand margin at the beginning text line of the change and in the right-hand margin at the end of the text line change.
- (2) Where the addition of words, sentences, and paragraphs causes the original text to spill over to another page, the spill over text shall be contained on an inserted page labeled an A-page. This page will contain only the spill over from the original page. Asterisks will be placed only on each side of the page number, i.e., *SECTION 08810 PAGE 3A (AM0003)*. This notation will be taken because only the physical page is new, not the content.
- (3) Where words, sentences, and paragraphs are deleted, an asterisk shall be placed in the left margin of the page where the removed text line began. Another asterisks shall be placed in the right margin of the page at the end of the removed text line. The space the removed text occupied shall be left vacant, i.e., the remaining text shall not be moved up to fill the space. For the deletion of entire paragraphs, the word "Deleted" shall be placed where the text line originated.

b. New Pages/Deleted Pages Within a Section.

- (1) The content of new pages to be inserted within an existing section shall be processed in the same manner as the original. In addition, each added page shall contain an asterisk in the upper left-hand margin at the top of the page where the new text line begins on the page and an asterisk in the lower right-hand margin at the bottom of the page where the text line ends.
- (2) Pages which are deleted shall have an asterisk placed in the upper left-hand margin where the text line was deleted and another one in the lower right-hand margin where the text line ended. The deleted sheet shall have the word "Deleted" in the upper left-hand corner where the original text line existed.

c. New Sections/Deleted Sections.

- (1) The addition of new sections to an existing specification package is handled page-by-page as described in paragraph b above.
- (2) When a section is deleted, a blank sheet is reinserted in place of the section with asterisks as described in paragraph b above. In place of the first line of text, the words "This Section, pages x through xx has been deleted" will be added. The blank page insert retains the first sheet number.

d. Amended Page Numbers.

On pages which have been amended, the page number shall have the amendment number, consisting of the abbreviation "Am" followed by four numerical spaces "0001, 0002," etc., placed inside parenthesis following it.

e. Summary of Amended Pages.

Changes to the specifications and/or drawings as a result of the amendment shall be itemized and briefly described on a separate sheet and included with the amendment.

1.5 PREPARATION OF SPECIFICATION CHANGE ORDERS

Changes to the specifications which occur after the award of the contract are done through Change Orders. The rules governing placement of asterisks and adding and/or deleting pages or sections are the same as for amendments. The itemization and description of changes to specifications and/or drawings is also required. One deviation is a change order number must be placed at the bottom of the page. Another is a rough order magnitude (ROM) cost estimate and a reason for the change (design deficiency, new requirements, etc.) must be submitted.

1.6 EXAMPLES

The following examples illustrate the format to be used in preparing a table of contents (Example 1), sections of a specification marked up and finalized (Examples 2 and 3), as well as two types of amendment pages (Examples 4 and 5). These examples are to be considered typical and not applicable to any specific project.

EXAMPLE 3

SECTION TABLE OF CONTENTS

DOORS & WINDOWS

SECTION 08810

GLASS AND GLAZING

PART 1	GENERAL
1.1 1.2 1.3 1.4	REFERENCES GENERAL SUBMITTALS DELIVERY AND STORAGE
1,3	GUARANTEE
PART 2	PRODUCTS
2.1 2.1.1 2.1.2 2.1.3 2.1.4 2.2 2.2.1 2.2.2	Insulating Glass Units Tempered Glass Support Building Shower and Latrine Windows Support Building Office Windows and Doors SETTING MATERIALS Glazing Compound and Preformed Glazing Sealants
PART 3	EXECUTION
3.1 3.2	INSTALLATION CLEANING

-- End of Section Table of Contents --

SECTION 08810

GLASS AND GLAZING

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 1036

(1991) Flat Glass

ASTM C 1048

(1991) Heat-Treated Flat Glass - Kind HS, Kind FT Coated and Uncoated Glass

ASTM E 773

(1988) Sealed Durability of Sealed

Insulating Glass Units

ASTM E 774

(1988) Sealed Insulating Glass Units

FLAT GLASS MARKETING ASSOCIATION (FGMA)

FGMA-01

(1990) Glazing Manual

1.2 GENERAL

Glass shall be provided in the locations indicated. Glazing may be performed in the shop or in the field using glass of the quality and thickness specified or indicated.

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01300 SUBMITTAL DESCRIPTIONS:

SD-01 Data

Glass; GA. Setting Materials; GA.

Manufacturer's descriptive product data, handling and storage recommendations, and installation instructions.

SD-04 Drawings

Glazing Materials and Accessories; GA.

Drawings showing complete details of the proposed setting methods and materials.

SD-13 Certificates

Glass: FIO.

Certificates shall state that the glass meets the specified requirements. Labels or marking affixed to the glass will be accepted in lieu of certificates.

1.4 DELIVERY AND STORAGE

Glazing compounds shall be delivered to the site in the manufacturer's unopened containers. Glass shall be stored indoors in a safe, well ventilated dry location and shall not be unpacked until needed for installation. Glass delivery scheduling shall be such as to not require onsite storage over 1 month.

1.5 GUARANTEE

Insulating glass units shall be guaranteed not to develop material obstruction to vision as a result of dust or film formation on the inner glass surfaces caused by failure of the hermetic seal or loss of dehydration, other than through glass breakage, within a 10-year period following installation.

PART 2 PRODUCTS

2.1 GLASS

Glass shall conform to the requirements of ASTM C 1036 unless specified otherwise.

2.1.1 Insulating Glass Units

Insulating glass units shall have polyisobutylene primary seal with two part silicone secondary seals. Aluminum spacer frame shall have bent or soldered corners. Insulating glass units shall conform to ASTM E 773 and ASTM E 774 Class A.

2.1.2 Tempered Glass

ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality q3, 1/4-inch thick.

2.1.3 Support Building Shower and Latrine Windows

Formed of two pieces of Type II, Class I glass thickness as indicated, separated by a 1/4-inch dehydrated air spare hermetically sealed.

2.1.4 Support Building Office Windows and Doors

Formed of two pieces of ASTM C 1048, Kind FT, Condition A, type I, Class 1, Quality q3, 1/4-inch thick, separated by a 1/4-inch dehydrated air space, hermetically sealed.

2.2 SETTING MATERIALS

2.2.1 Glazing Compound and Preformed Glazing Sealants

Suitable type approved for the application and in accordance with applicable portions of FGMA-01. Materials used with aluminum frames shall be aluminum colored, nonstaining, and not require painting. Other materials which will be exposed to view and unpainted shall be gray or neutral color.

2.2.2 Glazing Accessories

As required to supplement the accessories provided with the items to be glazed and to provide a complete installation, including glazing points, clips, shims, angles, beads, setting blocks, and spacer strips. Ferrous metal accessories which will be exposed in the finished work shall have a finish that will not corrode or stain while in service.

PART 3 EXECUTION

3.1 INSTALLATION

Glazing shall be performed in accordance with the approved installation instructions of the glass manufacturer.

3.2 CLEANING

Glass surfaces shall be thoroughly cleaned with labels, paint spots, putty, and other defacement removed, and shall be clean at the time the work is accepted.

-- End of Section --

EXAMPLE 4

Amendment including addition/deletion of words/sentences SD-13 Certificates

Glass; FIO.

Certificates shall state that the glass meets the specified requirements. Labels or marking affixed to the glass will be accepted in lieu of certificates.

1.4 DELIVERY AND STORAGE

Glazing compounds shall be delivered to the site in the manufacturer's unopened containers.

Glass delivery scheduling shall be such as to not require onsite storage over 1 month.

1.5 GUARANTEE

Insulating glass units shall be guaranteed not to develop material obstruction to vision as a result of dust or film formation on the inner glass surfaces caused by failure of the hermetic seal or loss of dehydration, other than through glass breakage, within a 5 year period following installation.

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PART 2 PRODUCTS

2.1 GLASS

Glass shall conform to the requirements of ASTM C 1036 unless specified otherwise.

2.1.1 Insulating Glass Units

Insulating glass units shall have polyisobutylene primary seal with two part silicone secondary seals.

Insulating glass units shall conform to ASTM E 773 and ASTM E 774 Class A.

2.1.2 Tempered Glass

ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality q3, 1/4-inch thick.

2.1.3 Support Building Shower and Latrine Windows

Formed of two pieces of Type II, Class I glass thickness as indicated, separated by a 1/4-inch dehydrated air spare hermetically sealed.

2.1.4 Support Building Office Windows and Doors

Formed of two pieces of ASTM C 1048, Kind FT, Condition A, type I, Class 1, Quality q3, 1/4-inch thick, separated by a 1/4-inch dehydrated air space, hermetically sealed.

EXAMPLE 5

Amendment including deletion of entire page.

* Deleted.